

REMARKS

The above-captioned application is a divisional of United States Application Serial No. 08/978,289, filed November 25, 1997, now U.S. Patent No. 6,361,939, which claims priority from Provisional U.S. Patent Application Numbers 60/031,806, filed November 27, 1996, and 60/032,767, filed December 11, 1996.

Claims 20-27 will be pending after entry of this Amendment and Response. Claims 1-10 and 19 have been withdrawn from consideration by the Examiner. Claims 11-18 stand rejected. Claims 20-27 have been added. Claims 1-19 have been canceled.

Support for claims 20-27 can be found in the specification, for example, at page 3, lines 7-11, page 7, lines 23-35, Table 2 (pages 22-26), from page 35, line 27 to page 36, line 11, from page 36, line 28 to page 37, line 10, from page 77, line 30 to page 79, line 15, and in the sequence listing. Therefore, no new matter has been added.

This Amendment and Response has been prepared according to the USPTO's revised amendment format.

Restriction

The Examiner has noted that claims 11-18 are only under examination as they relate to polynucleotides encoding A07C03. New claims 20-27 only relate to A07C03.

Objection to Specification

The Examiner has objected to the specification, indicating that it should be updated to reflect the issuance of U.S. Patent No. 6,361,939. Applicants have updated the specification according to the Examiner's suggestion. Accordingly, withdrawal of the objection to the specification is respectfully requested.

Rejection under 35 U.S.C. § 101

Claims 11-18 stand rejected under 35 U.S.C. § 101 as lacking utility. Specifically, the Examiner stated that the claims lack a specific, substantial, and credible utility.

Claims 11-18 have been canceled so the rejection under 35 U.S.C. § 101 with respect to those claims is moot. However, applicants submit that claims 20-27 are also free from this rejection.

The utility of the A07C03 polynucleotides is described in the specification, for example, from page 1, line 19 to page 2, line 23, page 17, lines 22-23, and from page 77, line 30 to page 79, line 15. Applicants have provided evidence that A07C03 polynucleotides are only expressed in dendritic cells. Therefore, a person having skill in the art would be able to use these polynucleotides as a marker for dendritic cells. Dendritic cells are specialized antigen-presenting cells that efficiently process and present antigens to, for example, T cells. Because the A07C03 polynucleotides encode a membrane bound protein which likely interacts with a ligand, the A07C03 polypeptide likely plays a role in the initiation and control of the immune response. Furthermore, applicants have provided evidence that A07C03 is a member of the Ig superfamily of receptors, and is closely related to the CD8 family. In conclusion, applicants submit that claims 20-27 satisfy the requirements of 35 U.S.C. § 101. Accordingly, withdrawal of the rejection under 35 U.S.C. § 101 is respectfully requested.

Rejections under 35 U.S.C. § 112, first paragraph

Enablement

Claims 11-18 stand rejected under 35 U.S.C. § 112, first paragraph, for lack of enablement. Specifically, the Examiner stated that one of skill in the art would not know how

to use the claimed invention so that it would operate as intended without undue experimentation.

Claims 11-18 have been canceled so the rejection under 35 U.S.C. § 112, first paragraph, for lack of enablement with respect to those claims is moot. However, for the reasons stated above, applicants submit that claims 20-27 are also free from this rejection, as they satisfy the requirements of 35 U.S.C. § 101. Accordingly, withdrawal of the rejection under 35 U.S.C. § 112, first paragraph, for lack of enablement is respectfully requested.

Written Description

Claims 11-18 stand rejected under 35 U.S.C. § 112, first paragraph, for lack of written description. Specifically, the Examiner stated that the subject matter was not described in such a way as to reasonably convey to one of skill in the art that the inventor had possession of the claimed invention.

Claims 11-18 have been canceled so the rejection under 35 U.S.C. § 112, first paragraph, for lack of written description with respect to those claims is moot. However, applicants submit that claims 20-27 are also free from this rejection.

Claims 20-27 are directed to polynucleotides comprising the nucleic acid sequence of SEQ ID NO: 7, to polynucleotides encoding a polypeptide comprising the amino acid sequence of SEQ ID NO: 8, and to polynucleotides encoding a polypeptide comprising residues 1-219 of the amino acid sequence of SEQ ID NO: 8.

The A07C03 polypeptide and nucleic acids encoding the polypeptide are identified in Table 2 and the sequence listing. In addition, the signal sequence for the polypeptide is also disclosed in Table 2, the sequence listing, and on page 77. Therefore, applicants submit that claims 20-27 satisfy the requirements of 35 U.S.C. § 112, first paragraph. Accordingly,

withdrawal of the rejection under 35 U.S.C. § 112, first paragraph, for lack of written description is respectfully requested.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 11-15 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner stated that the recitation of "said A05C03" is vague and indefinite as the clone has no antecedent basis in Claim 1, and that no such clone is disclosed in the specification.

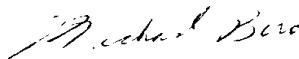
Claims 11-15 have been canceled. Withdrawal of the rejection of claims 11-15 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

CONCLUSION

Applicants submit that claims 20-27 have utility, are enabled, and are described in the specification. Accordingly, reconsideration of the rejections and allowance of the claims at an early date are earnestly solicited.

If the undersigned can be of assistance to the Examiner in addressing issues to advance the application to allowance, please contact the undersigned at the number set forth below.

Respectfully submitted,



Michael G. Biro
Reg. No. 46,556

Schering-Plough Corporation
Patent Department
Mail Stop K-6-1, 1990
2000 Galloping Hill Road
Kenilworth, NJ 07033-0530

Phone: (908) 298-5098 Fax: (908) 298-5388